

SPACE MOUNTED RH & T SENSORS



Features:

- $\pm 2\%$ and $\pm 3\%$ Accuracy Versions
- Multi-function sensor
- Fully configurable LCD Display
- Direct thermistor temperature options available
- Blends into the fabric of any building

Benefits:

- High stability & reliability
- Long term stability
- 4-20mA, 0-5Vdc and 0-10Vdc outputs for compatibility with a wide range of controllers

The TH00105 uses the latest high accuracy RH & T element, and offers options such as set point adjust momentary switch and fan speed selection, together with a multi-line backlit LCD display. A 0-10Vdc override status input option is also available, allowing occupancy indication on the display.

4-20mA, 0-10Vdc or 0-5Vdc outputs for temperature and RH are available as standard. A custom output range for temperature can be requested, between 0 and $+50^{\circ}\text{C}$.

A directly connected passive thermistor temperature output is also available, as an alternative to the standard active temperature output.

Specifications:

Outputs:

- Voltage 0-10Vdc or 0-5Vdc
- Current 4-20mA*

Output ranges:

- RH 0 to 100%
- Temperature 0 to 40°C (standard)
-TR in range of 0 to 50°C
- Enthalpy -20 to +250 kJ/kg
- Dewpoint -50 to +50°C
- Temp. accuracies $\pm 0.5^\circ\text{C}$, between 20 & 40°C

Optional Passive Outputs:

Thermistor

- Set point 0-10K Ω or 11-1K Ω linear
- Momentary switch VFC
- Fan Speed Resistive

Power Supply:

- Voltage 12-26Vac or 16-26Vdc @60mA max.
- Current 20-26Vdc only @70mA max.

Ambient:

- Temperature 0 to 50°C
- RH 0 to 95% RH, non-condensing

Housing:

- Material ABS (flame retardant)
- Colour polished white finish
- Dimensions 115 x 85 x 28mm
- Ambient range -10 to 60°C
- Protection IP30

Country of origin UK



Notes:

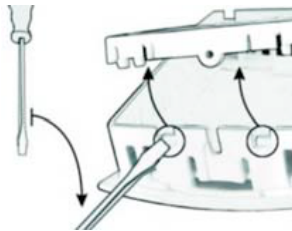
If using the -LCD option, when in loop powered mode the back light will not be lit. The transmitter will require a 0V connection for the back light to work (3-wire).

Installation:

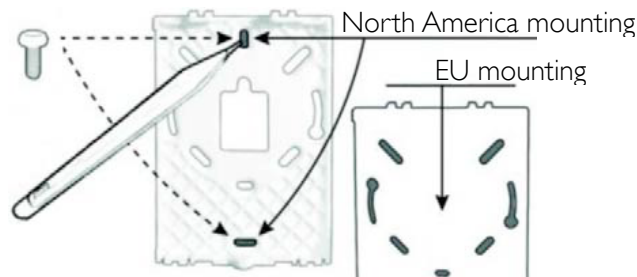


Antistatic precautions must be observed when handling these sensors. The PCB contains circuitry that can be damaged by static discharge.

1. Select a location on a wall of the controlled space which will give a representative sample of the prevailing room condition. Avoid sitting the sensor in direct sunlight, on an outside wall or near heat sources. An ideal mounting height is 1.5m from the floor.
2. Undo the tamperproof screw at the bottom of the housing.
3. To remove the front panel from the base, twist a screwdriver as below and pull gently the front panel from the base.



4. Using the base as a template mark the hole centres and fix to the wall with suitable screws. Alternatively the base plate can be mounted on to a conduit box or standard recessed back box. The base plate is suitable for EU & North America fixings.



5. Feed cable through the hole in the base plate of the housing and terminate the cores at the terminal block as required. Leaving some slack inside the unit.
6. Set jumper links according to output type required (see page 3 for jumper details).
7. Replace the housing to the base plate.
8. Fit the tamperproof screw (if required) through the lug at the bottom of the base plate.
9. Before powering the sensor, ensure that the supply voltage is within the specified tolerances.

Note: When using the sensor with a 4-20mA output, it is important to make all electrical connections before applying the supply voltage. If the sensor is not connected sequence, then you may see a higher reading than expected (can be as much as 55mA).

10. Allow 3 minutes before checking functionality, and at least 30 minutes before carrying out pre-commissioning checks. This will allow the electronics time to stabilise.

Warning:

Relative humidity transmitters are sensitive electronic devices and care should be taken at all times to ensure that they are not exposed to extreme ambient conditions or incorrect electrical connection. Transmitters should not be exposed to direct moisture contact (e.g. rain) and saturation of the transmitter at very high humidity should be avoided wherever possible.